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CORRECTION

Correction to: Barrier films and dressings for the prevention of acute Radiation dermatitis: A systematic review and meta-analysis

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In addition to the information that we included in our meta-analysis [1] (maximum Common Terminology Criteria for Adverse Events [CTCAE] score, mean pruritus score, and mean pain score), the Chan et al. study in 2019 also provided its primary outcome, the CTCAE score, as a Kaplan–Meier survival analysis to evaluate the time to skin toxicity. In addition, Cox regression analysis was used to assess the risk of patients developing acute radiation dermatitis (ARD) grades 2 and 3 [2]. These outcomes provide additional insights to the comparison of the StrataXRT to Sorbolene cream, but do not change the overall conclusion of the primary meta-analysis.

According to the analyses of the CTCAE score, the risk of ARD is reduced throughout the entire radiotherapy (RT) treatment among StrataXRT users compared to controls. Patients using StrataXRT had a longer period without CTCAE grade 2 ARD with a mean time to event of four weeks compared to three weeks for the Sorbolene group. The risk of developing grade 2 ARD was reduced by 41.0% throughout treatment due to the application of StrataXRT compared to Sorbolene ($p < 0.001$). Regarding grade 3 ARD, 75% of the patients receiving StrataXRT did not present this grade of skin reaction during six weeks compared to five weeks in the Sorbolene group. The Cox regression analysis showed that patients using StrataXRT had a 49.4% reduced risk of developing grade 3 ARD throughout treatment compared to the Sorbolene group ($p = 0.004$) [2].

There was only 1 randomized controlled trial (RCT) in breast and 1 RCT in head and neck cancer patients with StrataXRT at the time of writing. Therefore, we pooled them together with the accompanying limitation of different primary cancers [2, 3]. Considering the diversity of the two studies, we also report the detailed results of both studies

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here. Ahn et al. (2020) enrolled 56 breast cancer patients and randomized them to the StrataXRT group ($n=21$) or the moisturizer (X-derm®) group ($n=28$). No significant differences between both groups were found regarding the clinician-assessed visual rating scales (e.g., CTCAE, Radiation Therapy Oncology Group [RTOG], Catterall skin scoring profile [CSSP]) nor the patient-reported outcomes (PROMs; dryness, itching, burning, pain) during the entire study period as all patients presented a mild type of ARD (CTCAE and RTOG grade 1). However, the two-way repeated-measures ANOVA revealed a group-by-time interaction effect for two physiological skin measures, namely the erythema index ($F=3.609$, $p=0.008$) and melanin index ($F=3.475$, $p=0.015$). The post-hoc analysis demonstrated a significantly lower erythema and melanin index in the StrataXRT patients compared to the moisturizer group [3].
Chan et al. (2019) recruited 197 head and neck cancer patients and randomized them to the StrataXRT ($n=100$) or Sorbolene group ($n=97$). The degree of ARD based on the mean CTCAE score was significantly lower in the StrataXRT (mean = 2.4, 95% CI: 2.2–2.6) compared to the Sorbolene group (mean = 2.7, 95% CI: 2.5–3.0, $P=0.002$). At the final RT session, the StrataXRT arm had a significantly lower degree of CTCAE grade 2 (80% vs. 91%, respectively) and grade 3 (28% vs. 45%, respectively) ARD compared to the Sorbolene arm. The PROMs (pain, itching, and quality of life), adverse events, and treatment interruptions did not significantly differ between the groups [2].
In conclusion, the current findings of the meta-analysis on StrataXRT are limited by only two studies (search up to September 2020) in two diverse patient populations. Therefore, more RCTs investigating the efficacy of StrataXRT for ARD prevention are needed to make a future meta-analysis more robust.

References

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